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Advances in Rock Dynamics and Applications

Editors: Yingxin Zhou & Jian Zhao



Advances in Rock Dynamics and Applications

Editors:

Yingxin Zhou Defence Science & Technology Agency (DSTA), Singapore Jian Zhao École Polytechnique Fédérale de Lausanne (EPFL), Switzerland

The study of rock dynamics is important because many rock mechanics and rock engineering problems involve dynamic loading ranging from earthquakes to vibrations and explosions. The subject deals with the distribution and propagation of loads, dynamic responses and processes of rocks and rate-dependent properties, coupled with the physical environment. Rock dynamics has a wide range of applications in civil, mining, geological and environmental engineering. However, due to the additional "4th" dimension of time, rock dynamics remains, in the discipline of rock mechanics, a relatively more challenging topic to understand and to apply, where documented research and knowledge are limited.

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